## 2016

## M.Sc. Part-I Examination

## DIETETICS AND COMMUNITY NUTRITION MANAGEMENT

PAPER—III (Unit-6)

Full Marks: 50

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Answer Question No. 1 and any four from the rest.

- 1. Answer any five of the following:
- 5×2

- (a) What is a biofermenter?
- (b) How is moist heat different from dry heat?

- c) What is 'lag' phase and 'log' phase of a bacterial growth?
- (d) What do you mean by photolithographic bacteria?
- (e) What is the principle behind the process of autoclave?
- (f) Name two common food preservations.
- (g) Name two microbes that are used as good fermenters.
- (h) What is microaerophilic bacteria?
- 2. (a) Explain the methods for obtaining the pure culture of bacteria.
  - (b) Differentiate between 'selective media' and 'differential media'.

6+4

- 3. (a) What is the purpose of a human food safety evaluation?
  - (b) Which organs are susceptable end points to the toxicological effect of food?
  - (c) How toxicity is assessed?

3+3+4

- 4. (a) What is meant by food additives?
  - (b) What is the utility of such food additives?
  - (c) Name some of the naturally occurring toxicants emphasizing on their sources.

1+5+4

- 5. (a) Explain four important methods of food presentation.
- (b) How is freeze-drying important in food preservation?  $(4\times2)+2$
- 6. (a) What is meant by food borne infection and intoxication?
  - (b) Explain the various methods of prevention of food intoxication.

(2+2)+6

- 7. (a) Enumerate the benefits of fermented food over the non-fermented ones.
  - (b) Explain the mode of transmission of different food borne infections.

5+5

- 8. (a) Discuss briefly the chemical and physical requirement of bacterial growth.
  - (b) What do you mean by transitional zones?
  - (c) How can the continuous growth of a bacteria reached?

6+2+2

- 9. (a) What is the method of detection of food borne disease outbreak?
  - (b) Explain the role of certain viruses in food spoilage of contamination.

5+5